

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed July 11, 2003. No amendments have been entered to the presently pending claims. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

Rejections under 35 U.S.C. §102

The Office Action indicates that claims 1 - 19 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Garcia*. Specifically, the Office Action indicates that independent claims 1, 11, 15 and 17 are anticipated by *Garcia*, because *Garcia* teaches: receiving the active stereo video data containing the right channel pixel data and the left channel pixel data corresponding to the image to be rendered; re-sequencing (field displacement and offsetting) the right channel pixel data and the left channel pixel data; and simultaneously outputting corresponding frames of the right channel pixel data and the left channel pixel data for displaying the image to be rendered in passive stereo. As set forth in detail below, Applicants respectfully disagree with the characterization of the teachings of *Garcia* and that the currently pending rejections are improper.

In general, *Garcia* teaches a synthesized stereoscopic imaging system and method that involves the use of a two-dimensional, single, monocular source video signal that is converted to an active stereo video signal. For instance, Applicant respectfully refers the Examiner's attention to *Garcia*, column 6, lines 17 – 32 which recites:

This is accomplished by methods including the steps of: acquiring and digitization of a two-dimensional single monocular source video signal (e.g., standard PAS. NTSC, or equivalent video); digital electronic implementation and improvements to the DeepVision process for enhancing depth information; production of two channels of electronically processed video, one alternatively to be delivered to the right eye for viewing, the other to be subsequently delivered to the left eye converting the electronically

processed video signals to a frame- or field-multiplexed stereoscopic display signal; displaying the multiplexed video signal in human-viewable form on a single-screen video display; viewing the video display with glasses or the like adapted for alternate left-eye, right-eye viewing; and controlling alternate left-eye, right-eye shuttering of the glasses in synchronism with display of the frame-or field-multiplexed video signal.

As set forth above, *Garcia*'s recitation of "production of two channels of electronically processed video, one alternately to be delivered to the right eye for viewing, the other to be subsequently delivered to the left eye," meets Applicants' definition of "active stereo." Specifically, Applicants have defined this term as follows:

As utilized herein, the term "active stereo" refers to the presentation of alternating channels, *i.e.*, one channel being associated with the left eye of a viewer (the "left channel") and the other channel being associated with the right eye of the viewer (the "right channel"), of video display. Typically, active stereo is facilitated by the use of headgear that is synchronized with a display device so that the viewer views one channel of the video display with the left eye and the other channel with the right eye.

18 Additionally, Applicants have defined the term "passive stereo" to refer to the presentation of simultaneous channels, *i.e.*, one channel being associated with the left eye of a viewer (the "left channel") and the other channel being associated with the right eye of the viewer (the "right channel"), of video display. Typically, passive stereo is facilitated by the use of headgear which is configured to allow each eye of the viewer to view only one of the simultaneously displayed channels of video.

Clearly, *Garcia* does not involve the use of "passive stereo" as defined by the Applicants. Further evidence that *Garcia* involves the presentation of ^{features} active stereo can be found at *Garcia*, column 12, line 12 - column 13, line 58. As described therein, the video provided by *Garcia* is "viewed through synchronous electronic glasses 300, the left eye will see one image, *i.e.*, frame one with a negative spatial displacement and the right eye will see the other image, *i.e.*, frame F2, with the opposite spatial displacement." *Garcia*, column 12, lines 29 - 34. As described at column 7, line 61 - column 8, line 14, glasses 300 are

shuttered glasses which include lenses that are individually controlled so that an observer can only see through one of the lenses at a time. This also clearly refers to use of active stereo.

Referring now to the claims, claim 1 recites:

Claim 1 recites:

1. ***A method for converting active stereo video data into passive stereo video data***, the active stereo video data containing right channel pixel data and left channel pixel data, ***the active stereo video data being configured to enable alternate output of corresponding frames of the right channel pixel data and the left channel pixel data for displaying an image to be rendered in active stereo***, said method comprising the steps of:
 receiving the active stereo video data containing the right channel pixel data and the left channel pixel data corresponding to the image to be rendered;
 re-sequencing the right channel pixel data and the left channel pixel data; and
 simultaneously outputting corresponding frames of the right channel pixel data and the left channel pixel data ***for displaying the image to be rendered in passive stereo***.
(Emphasis Added).

Applicants respectfully assert that *Garcia* does not teach or otherwise disclose at least the features emphasized above in claim 1. Specifically, Applicants respectfully assert that *Garcia* does not discuss converting active stereo to passive stereo video data, as recited in claim 1. In this regard, Applicants respectfully request the Examiner to specifically identify those portions of *Garcia* that allegedly involve the use of passive stereo, as a review of *Garcia* reveals that the particular portions of that disclosure relied upon in the Office Action do not involve passive stereo as alleged. In this regard, Applicants respectfully request the Examiner to call the undersigned attorney for Applicants to ensure that *Garcia* is not misconstrued.

Since *Garcia* is legally deficient for the purpose of anticipating claim 1, Applicants respectfully assert that claim 1 is in condition for allowance. Additionally, since claims 2 – 5 and 7 – 10 depend either directly or indirectly from claim 1 and, thus, incorporate all the features/limitations of claim 1, Applicants respectfully assert that these claims also are in

condition for allowance. Additionally, these dependent claims recite other features/limitations which may serve as an independent basis for patentability.

Claim 11 recites:

11. *A device for converting active stereo video data into passive stereo video data*, the active stereo video data containing right channel pixel data and left channel pixel data, *the active stereo video data being configured to enable alternate output of corresponding frames of the right channel pixel data and the left channel pixel data for displaying an image to be rendered in active stereo*, said device comprising:

means for receiving the active stereo video data containing the right channel pixel data and the left channel pixel data corresponding to the image to be rendered;

means for re-sequencing the right channel pixel data and the left channel pixel data; and

means for simultaneously outputting corresponding frames of the right channel pixel data and the left channel pixel data *for displaying the image to be rendered in passive stereo*.

(Emphasis Added).

Applicants respectfully assert that *Garcia* does not teach or otherwise disclose at least the features emphasized above in claim 11. Therefore, Applicants respectfully assert that the rejection is improper and that claim 11 is in condition for allowance. Additionally, since dependent claims 12 – 14 include all of the features/limitations of claim 11, Applicants respectfully assert that these claims also are in condition for allowance.

Claim 15 recites:

15. *A device for converting active stereo video data into passive stereo video data*, the active stereo video data containing right channel pixel data and left channel pixel data, *the active stereo video data being configured to enable alternate output of corresponding frames of the right channel pixel data and the left channel pixel data for displaying an image to be rendered in active stereo*, said device comprising:

logic configured to receive the active stereo video data containing the right channel pixel data and the left channel pixel data corresponding to the image to be rendered;

logic configured to re-sequence the right channel pixel data and the left channel pixel data; and

logic configured to simultaneously output corresponding frames of the right channel pixel data and the left channel pixel data *for displaying the image to be rendered in passive stereo*.

(Emphasis Added).

Applicants respectfully assert that *Garcia* does not teach or otherwise disclose at least the features emphasized above in claim 15. Therefore, Applicants respectfully assert that the rejection is improper and that claim 15 is in condition for allowance. Additionally, since dependent claim 16 includes all of the features/limitations of claim 15, Applicants respectfully assert that claim 15 also is in condition for allowance.

Claim 17 recites:

17. *A device for converting active stereo video data into passive stereo video data*, the active stereo video data containing right channel pixel data and left channel pixel data, *the active stereo video data being configured to enable alternate output of corresponding frames of the right channel pixel data and the left channel pixel data for displaying an image to be rendered in active stereo*, said device comprising:

an input mechanism configured to receive the active stereo video data, the active stereo video data being provided as multiple digital video data streams containing the right channel pixel data and the left channel pixel data; and

an output mechanism electrically communicating with said input mechanism, said output mechanism being *configured to* receive the right channel pixel data and the left channel pixel data and *selectively provide the pixel data as any one of a passive stereo video data stream and an active stereo video data stream*.

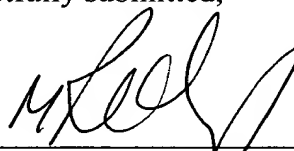
(Emphasis Added).

Applicants respectfully assert that *Garcia* does not teach or otherwise disclose at least the features emphasized above in claim 17. Therefore, Applicants respectfully assert that the rejection is improper and that claim 17 is in condition for allowance. Additionally, since dependent claims 18 and 19 include all of the features/limitations of claim 17, Applicants respectfully assert that these claims also are in condition for allowance.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1 – 19 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on 9/18/03.


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